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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,785	08/03/2001	Thomas Lopatic	14616	7412

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400 Garden City Plaza
Garden City, NY 11530

EXAMINER

BAYAT, BRADLEY B

ART UNIT PAPER NUMBER

3621

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/921,785	Applicant(s) LOPATIC, THOMAS	
	Examiner Bradley B. Bayat	Art Unit 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 76-98 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 76-98 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 31, 2006 has been entered.

Status of Claims

This communication is in response to remarks and amendment filed on August 4, 2006.

- Claims 76-78, 82-86, 89-95 and 98 have been amended.
- Claims 1-75 were previously cancelled.
- Thus, claims 76-98 remain pending.

Response to Amendment

The amendment filed on August 4, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the step of "relocating all instructions and all variables..." in independent claims 76 and 98. Although the disclosure identifies "relocation information," the examiner has been unable to identify the step of relocating as claimed. It is requested that the applicant clarify support for this step as noted above.

Otherwise, applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

Applicant's arguments filed August 4, 2006 have been fully considered but they are not persuasive.

As per independent claims 76 and 98, applicant contends that the cited reference only refers to a specific and well known technique of wrapping and does not disclose or make suggestions to a different way of inserting or embedding new code/instructions into an existing executable file (response pp. 7-8). Biddle describes the wrapping as only part of one embodiment [0058, 71,77], whereas in another embodiment, during the decryption process on the user computer, the start-up code, used as the decryption key, performs a hashing algorithm on each byte of code as it is decrypted and creates a checksum table in memory to provide further security [0082].

Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., other techniques of modifying files; invention suggests a much more secure and reliable possibility of implementing instructions and/or variables in an existing executable file in order to ensure the protection of digital rights and license rights) are not recited in the rejected claims (response pp. 7-9). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that the claimed invention modifies the internal structure of the original executable file wherein through the identifying step "it becomes possible to relocate all instructions and all variables within said executable file effected [sic] by the insertions...

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(response p. 9).” Relocation information consists of a list of all memory references in the code segment or data segment of the executable file. As stated above, references are resolved and memory addresses are assigned at link time. Yet, knowing all memory references, the code segment and data segment can be loaded and stored in memory starting at arbitrarily selected base addresses, be adapted to the selected base addresses by adjusting all memory references accordingly, and finally be successfully executed in the chosen memory area, independent from the addresses chosen at link time. Extraction of information concerning memory references from the relocation information is therefore also possible. See specification [0133].

Biddle discloses that at least two calls may be included in the initialization of the vendor software for invoking distributor code and performing security checks. Calls to the distributor code may also be placed by the vendor 40 at strategic locations throughout the software. The vendor 40 can add a call to invoke the licensing API code and a call that will perform a security check against the licensing information. The software may be tested using the toolkit's test version of the licensing calls and the licensing manager. When the testing cycle is complete, the vendor 40 may re-link the software with the original version of the distributor software provided in the toolkit. Any method of re-linking the software, now known or hereafter derived by those skilled in the art, may be used. The distributor software provided in the toolkit is substituted, for example, with the actual licensing API code during the wrapping process. By not providing the final version of the licensing code, the distributor 25 maintains security and proprietary security of the code, which otherwise could be compromised or unwittingly passed on to a potential hacker if provided to the vendor in the toolkit. Moreover, allowing the vendor 40 to integrate the

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licensing calls in-house reduces potentially unwanted exposure to the vendor's intellectual property. See Biddle [0074].

Please note that applicant's amendments reciting "and/or" language to the claims merely require the reference to disclose either portion of the step, thereby failing to further limit the scope of the claim.

In addition, applicant's use of "adapted to..." language in the claims fails to further limit the scope of the claim. There mere adaptability to be able to perform the purported step does not necessitate the performance of the step. *In re Dean*, 130 USPQ 107 (CCPA 1962). Applicant is reminded that optional or conditional elements do not narrow the claims because they can always be omitted. See *e.g.* MPEP §2106 II C: "Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.]" and *In re Johnston*, 435 F.3d 1381, 77 USPQ2d 1788, 1790 (Fed. Cir. 2006) ("As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.").

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 76-98 are rejected under 35 U.S.C. 102(e) as being anticipated by Biddle et al., US 2002/0107809 A1.

As per the following claims, Biddle discloses:

76, 98. A method/processor-readable medium of modifying an executable file comprising the steps of: identifying one or more instructions and/or one or more variables within the executable file; inserting data and/or one or more instructions within said executable file before or after said identified one or more instructions and/or one or more variables, whereby any inserted instructions implements license verification code and any inserted data is license related; and relocating all instructions and all variables within said executable file affected by the insertion, and adapting all of one or more instructions and all of the one or more variables within said executable file that relate to the relocated instructions or variables [0055-0056, 0076-0077, 0091-0104].

77. The method according to claim 76, characterized in that at least part of the data and/or the one or more instructions inserted within the executable file is adapted to enable automatic testing of the integrity of at least one part of the executable file [0066-0074].

78. The method according to claim 76, characterized in that the identification of the one or more instructions and/or one or more variables is based on information obtained from at least one of an initial, intermediate and final state of the creation process resulting in the executable file [0060-0077].

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79. The method according to claim 78, characterized in that the information is obtained from object files created in the process of generating the executable file from a source code file [0078].

80. The method according to claim 78, characterized in that the information is obtained from debug information created in the process of generating the executable file from a source code file [0059, 0077-0078, 0095].

81. The method according to claim 78, characterized in that the information is obtained from relocation information created in the process of generating the executable file from a source code file [0104-0129].

82. The method according to claim 76, characterized in that the data and/or the one or more instructions inserted in the executable file is adapted to enable the identification of the licensee of the software product comprising the executable file [0066-0081].

83. The method according to claim 76, characterized in that the data and/or the one or more instructions inserted in the executable file is adapted to enable an identification of the executable file itself [0082-104].

84. The method according to claim 76, characterized in that the data and/or the one or more instructions inserted in the executable file is adapted to enable an identification of the master file

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from which the executable file forms a copy before being modified (figures 6, 7 and associated text).

85. The method according to claim 76, characterized in that the one or more instructions inserted in the executable file is adapted to create a query to an execution control software program for a permission to run the executable file, and to control the execution of the executable file in accordance to the permission being granted or denied [0063-0069].

86. The method according to claim 76, characterized in that the one or more instructions inserted in the executable file is adapted to monitor changes to the executable file and to create a message indicating an infringement of the integrity of the executable file upon a change not being verified [0080-0116].

87. The method according to claim 85, characterized in that granting the permission to run the executable file comprises validation information in form of a request ticket [0063-0069].

88. The method according to claim 85, characterized in that the permission to run the executable file is formed by a runtime ticket [0063-0069].

89. The method according to claim 85, characterized in that the one or more instructions inserted in the executable file is adapted to receive a log-off ticket and to insert the log-off ticket within the executable file [0059-0069].

90. The method according to claim 89, characterized in that the one or more instructions inserted in the executable file is further adapted to return the log-off ticket to the execution control software program upon terminating the execution of the executable file [0114-0121].

91. The method according to claim 87, characterized in that the one or more instructions inserted in the executable file comprises verification code for verifying the validity of at least one type of ticket [0098].

92. The method according to claim 85, characterized in that the one or more instructions inserted in one or more instructions of the executable file is adapted to increment a counter related to the respective instruction each time said instruction of the executable file is involved [0058, 0084-0096].

93. The method according to claim 92, characterized in that said one or more instructions inserted in one or more instructions of the executable file is further adapted to send data concerning the value of the counter to the execution control software program upon terminating the execution of the executable file [0058, 0084-0096].

94. The method according to claim 87, characterized in that the one or more instructions inserted in the executable file comprises a provision of means for an execution of code received from the execution control software program [0055-0056, 0076-0077, 0091-0129].

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95. 'The method according to claim 94, characterized in that the one or more instructions inserted in the executable file comprises a provision of means for returning a result of the execution of said code to said execution control software program [0055-0056, 0076-0077, 0091-0129].

96. The method according to claim 76, characterized by at least one of changing an arrangement of at least two subroutines and changing the arrangement of at least two variables within the executable file [0058, 0084-0096].

97. The method according to claim 96, characterized in that the changing of the arrangement of the at least two subroutines and the changing of the at least two variables is performed by a pseudo-random permutation [0058, 0084-0096].

Although the Examiner has pointed out particular references contained in the prior art(s) of record in the body of this action, the specified citations are merely representative of the teachings in the art as applied to the specific limitations within the individual claim. Since other passages and figures may apply to the claimed invention as well, it is respectfully requested that the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.


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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley B. Bayat whose telephone number is 571-272-6704. The examiner can normally be reached on Tuesday-Friday 8 a.m.-6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Bradley B. Bayat
Patent Examiner
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